

## A Note on the “Use of Natural and Fractional Numbers in Rigved”

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In true sense, a **number** is wonderful **idea** conceived by the ancient man. It is definitely the product of his thinking ability. It helped him in counting and accounting the living and non-living things that are found in the surrounding or man-made means the goods produced by him. It also includes keeping record of his family members, domesticated animals, cultivation of the various crops, watching and noting the natural activities like days and nights, and seasons etc.

In **Rigved**, the numbers are expressed in words only as during the Vedic Period, the People presented their ideas in the spoken language. Even an animal like lioness keeps a close watch on its **number of cubs**. When one out of the three or four cubs goes missing, then it seriously searches here and there for some time.

**Basic Elements of Numerical System:** In the **Poems of Praise**, the **Rigvedic Poets** have expressed their **quantitative ideas** in the form of spoken words only and the basic elements of **Rigvedic Numerical System** used in the **Ten Mandalas of Rigved** are placed as under [1].

**Eka --One,**

**Dvi --Two,**

**Tri-- Three**

**Chatur-- Four**

**Pancha-- Five**

**Shashta-- Six**

**Sapta-- Seven**

**Ashta-- Eight**

**Nava-- Nine**

**Dasha-- Ten**

From the above, it is clear that in the series of One to Ten, every number occupies unique position in the sequence. Apart from the above mentioned verbal counts that include first nine numbers as the nine independent single units and tenth one as the compound character (the first two digit number of the currently used numerical system), the Poets also used many compound numbers formed from these basic elements which would be discussed subsequently.

## I. Natural Numbers:

Logically speaking, in the context of **Rigved**, a **number** is either a single or a collection of unit word or the combination of many words, used by the Poets to count or denote a numerical identity or a sum total.

As described earlier, in **Rigved**, there are basic nine numerical elements that have been given distinct place values. As the concept of **zero** is missing, we need to consider the fact that only positive integers are included in the basic list, and hence in the modern context, these numbers can be classified as the **Natural Numbers**. The numbers that help us in counting and representing quantities are generally known as the **Natural Numbers**.

### 1. Counting of the Natural Numbers

Counting of the first ten numbers can be easily done using our hands and fingers. When each of our ten fingers symbolically identified by a distinct number and then visually, it can be explained relative position and importance of each number with respective each other. As **one** becomes the smallest number and then the following natural number is exactly bigger by one than the earlier one, then **ten** being the largest among the numbers, takes the last place in sequence [1].

The most striking feature of **Rigvedic Poems** is use of **decimal numerical system** in them. Take a close look at the following verse taken from **Mandala-2**.

**Rv-2.1,8:** *tvamagne dama ā viśpatiṃ viśastvām rājānaṃ suvidatram ṛñjate /*

*tvam viśvāni svanīka patyase tvam sahasrāṇi śatā daśa prati //*

# To thee, the people's Lord within the house, the folk press forward to their King most graciously inclined.

Lord of the lovely look, all things belong to thee: **ten, hundred**, yea, a **thousand** are outweighed by thee.

In the original Sanskrit verse, the Poet has used three distinct numerical terms; **Sahasra** (thousand), **Shata** (hundred), and **Dasha** (ten) but they are placed in the decreasing order of the value which signifies that the Singer had the proper “**Sense of Decimal System**”.

Matter does not end here, there is still a bigger number in the series of decimal system and that is **Ayuta/अयुत** which actually means **Ten Thousand**.

Please note that during the Rigvedic era, as there was no script or digital way of presenting the numbers, then only possibility of learning through **practical methods**.

As explained earlier, **finger counting** is the simple method of training the children up to **ten** numbers. Yet introducing or teaching the concept of small numbers limiting to a value of **hundred** to the students/disciples during the Rigvedic period would not have been a very problematic thing as it can be done by telling them to count grains or small stones. But to count beyond hundred, a special technique based on practical approach is needed.

One way to ask the pupils to prepare first ten separate heaps of hundred grains/pebbles/ small stones. Then by merging these ten heaps of grains/pebbles would become **one thousand/sahastra/ सहस्र**. When ten such heaps of one thousand grains/pebbles are added together to make a single heap, then that count would become **ten thousand/ ayuta/अयुत**.

Please note that to express a single Vedic word **ayuta** in **English**, we have to use two distinct words i.e. **Ten** and **Thousand**. It means to say that the word **ayuta/ अयुत** was specially coined for use during that period. Its evolution definitely manifests the advance understanding and interest in the numerical system the Rigvedic Poets had. Yet **some scholars** term them as the **nomadic** and **illiterate People**. The term **ayuta/अयुत** is noticed in following verses.

**Ayuta/ अयुत** --Rv-4.26.7; Rv-8.1.5; Rv-8.2.41; Rv-8.21.18; Rv- 8.34.15; Rv-8.46.22.

## 2. “Accounting” to achieve the Bigger Numbers

Here the term **accounting** practically means the **oral processing of information** regarding the numbers at the time of **Rigved**, indirectly means verbally performing various mathematical operations such as addition and or multiplication to obtain high order figures.

### Some examples of Simple Addition and Multiplication

Following verse gives fairly good idea about the knowledge of Poet about the simple addition of the two numbers expressed in words and the product of their summation [1, 2].

**Rv-7.87,5: *tisro dyāvo nihitā antarasmin tisro bhūmīruparāḥ śaḍvidhānāḥ /***  
*ghṛtso rājā varuṇaścakra etaṃ divi preṅkhaṃhiranyaṃ śubhe kam ||*

# On him **three heavens** rest and are supported, and the **three earths** are there in **six fold** order.

The wise King **Varuna** hath made in heaven that Golden Swing to cover it with glory.

**3 (Heavens) + 3 (Earths) = 6 (six fold order present since pre-Rigvedic time)**

In the verse from the same hymn, the Poet speaks about the multiplication of two separate numbers in an oral form to define arrive at a new number [1].

**Rv-7.87,4:** *uvāca me varuṇo medhirāya triḥ sapta nāmāghnyā bibharti |*  
*vidvān padasya ghuhyā na vocad yughāya vipra uparāya śikṣan ||*

# To me who understand hath **Varuna** spoken, the names borne by the Cow are **three times seven**.  
 The sapient God, knowing the place's secret, shall speak as twere to teach the race that cometh.

Here the product of multiplication of **3** and **7** numbers is **3 x 7 = 21**.

**Table-1** provides information on use of multiplication operations in Rigvedic verse.

**Table-1: Examples of the Use of Multiplication Operation**

Verse number	Wordy Description with result in figure
<b>Rv-3.56,5</b>	<b>Tri Tri/</b> Three times Three = 9
<b>Rv-4.1,16</b>	<b>Tri Sapta/</b> Trice Seven/ Three times Seven = 21
<b>Rv-4.6,8</b>	<b>Dvi Pancha/</b> Two times Five = 10
<b>Rv-5.29,8</b>	<b>Tri Shata/</b> Three times Hundred = 300
<b>Rv-6.47,18</b>	<b>Shata Dasha/</b> Hundred times Ten = 1000
<b>Rv-8.19,37</b>	<b>TisruNa Saptatinam/</b> Three times Seventy =210
<b>Rv-8.96,8</b>	<b>Tri Shasti/</b> Thrice Sixty/ Three times Sixty = 180
<b>Rv-9.70,1</b>	<b>Tri Sapta/</b> Thrice Seven/ Three times Seven = 21
<b>Rv-9.98,6</b>	<b>Dvi Pancha/</b> Twice Five = 10

In addition to above, in some verses, the Composers have verbally described the large compound numbers. An example of the Poetic expression of a large **compound number** is found in the **Mandala-3** hymn **Rv-3.9** dedicated to **Agni** [1].

**Rv-3.9,9:** *trīṇi śatā trī sahasrānyaghnīm triṃśacca devā navacāsaparyan |*  
*aukṣan ghṛtairastrīṇan barhismā ādid dhotāraṃ nyasādayanta ||*

Here, the Poet has described the numbers in words as **trīṇi śatā trī sahasrānyaghnīm triṃśacca nava/** त्रीणि शता त्री सहस्राण्यग्निं त्रिंशच्च नव, literally means **three times hundred, thrice thousand, three times ten**, and **nine** and after addition of these numbers, the grand total comes out to be 300+3000+30+9 = **3339**. Same thing is also noticed in the verse **Rv-10.52,6**. In other words, the Composers were conversant with the **addition of numbers**.

Hence it would not be a wrong thing to believe that much before the compositions of the “**Poems of Praise**”, the **Ancestors of the Rigvedic Priests** would have devised the process of learning and memorizing the multiplication tables of numbers (at least 1 to 30 numbers) and then systematically transferring the same to their descendants.

Some examples of presentation of the very large numbers are given in **Table-2**.

**Table-2**

<b>Verse Number</b>	<b>Wordy Description</b>	<b>In Digits</b>
<b>Rv-6.26,6</b>	<b>Shashim Sahastra</b> /Sixty Thousand	60,000
<b>Rv-6.27,6</b>	<b>Trinshata Shatam</b> / Thirty Hundred	3000
<b>Rv-8.46,22</b>	<b>Shasthi Sahastra</b> /Sixty Thousand; <b>Vinshati Shata</b> /Twenty Hundred; <b>Dasha Sahastra</b> /Ten Thousand	60,000; 2000; 10,000

Although, as compared to present-day world scenario, many of us may find above mentioned numbers are relatively small, but then we need to consider the time period of composition of the **hymns of Rigved** and appreciate the application of novel numerical ideas.

**In sum**, Rigvedic Composers had mastered the methods of *counting* and *accounting*.

### **3. Introduction to Use of “Ordinal numbers” in the Praise Songs**

The **Natural Numbers** discussed earlier fall in the category of a **Cardinal numbers** as these entities depict “**Quantity**” or “**How Many**” things or characters are present. For example: 1, 2, 3 (can also be expressed in words as-One, Two, Three etc.) are the **Cardinal numbers** generally used to count a set of objects and inform us about the **quantitative aspects**.

An **Ordinal Number** is used to define order, position, and rank of something. For example: first, second, third, fourth, etc. are the **Ordinal numbers** commonly used to describe the order of the things. For the ease of remembrance, we can use following alphabets;

**C = cardinal number- -counting** (signals **Quantity**)

**O = ordinal number - -ordering** (sounds **Quality**)

Now coming to the point of the use of **Cardinal** and **Ordinal** Numbers by the Poet of **Mandala-2**, in the earlier part, we have seen some examples of the **Cardinal** Numbers used by the Singer in the Poems, and the following verse from **Mandala-2** communicates us about the use of **Ordinal** Numbers by the Poet in the composition [1].

**Rv-2.18,2:** *sāsmā araṃ prathamam sa dvitīyamuto tṛtīyam manuṣaḥ sa hotā |*  
*anyasyā gharbhamanya ū jananta so anyebhiḥ sacate janyo vṛṣā ||*

# This is prepared for him the **first**, the **second**, and the **third** time: he is man's Priest and Herald.

Others get offspring of another parent he goeth, as a noble Bull, with others.

Information given in the above verse drives the point that the Poet of the said verse, very well knew when and where to use the **Ordinal** numbers. The **forefathers of Composers of Rigved** would have taught them the difference between the **Cardinal** and **Ordinal Numbers** and their applications as well. Probably, **Rigvedic Poets** were the first to use **Ordinal numbers** in the ancient literature.

#### 4. Understanding the Concepts of “Ananta” and “Shata-krata”

a. **अनन्त/Ananta:** It is a very special Rigvedic word which can be translated as “infinite,” or “countless” or “limitless” or “timeless/eternal” [2]. It refers to the concept of anything which leads to **infinity** and in the modern-day science, it is denoted by a symbol- “ $\infty$ ”, means **infinity**.

The said word and its variants are noticed in the following Rigvedic verses.

**Ananta/ अनन्त:** Rv-1.113.3; Rv-1.115.5; Rv-1.121.9, Rv-1.130.3; Rv-1.64.10; Rv-4.1.7; Rv-5.47.2; Rv-6.61.8; Rv-7.104.17; Rv-10.75.3.

Even though the Rigvedic term **अनन्त/Ananta** is not directly related to the modern-day mathematical term, **Infinity**, still meaning-wise it suggests the same.

In the context of **Rigved**, the word **अनन्त/ Ananta** represents **timeless** or **countless** or **unending figure** or **feature**.

In the field of current science, the meaning of the term **Infinity** is a quality or quantity being infinite or non-measurable. Especially in the mathematics, when the sequence of **Natural Numbers** is shown as  $\{1, 2, 3, 4, 5, , , , , \infty\}$ , then it is said that it is an **infinite sequence**.

In brief, the term **अनन्त /Ananta** is related to something that has **no end** or **boundless** and hence cannot be assigned a **fixed value** and hence not described in words or figures.

b. शतक्रत/ *Shata-krata* actually means **hundred powers** or **hundred resolves** or **hundred wills** or **hundred actions**. It is one of the most commonly used adjectives for God **Indra** [1].

Probably the ancestors of pre-Rigvedic Priests after conceiving a new god **Indra** to smite the atmospheric demon **Vritra** (personification of drought), would have decided to decorate **him** with a special status as *Shata-Krata*. In the Vedic context, the term *Shata-krata* refers to an **Ideal God of Rigved**. In the practical sense, it can be said that God **Indra** meets the criterion of **perfection (100%)** or the **God designed to Perfection**.

Some Rigvedic Poets have purposely used शतक्रत/ *Shata-krata* a very special adjective in their poems for **Indra** to pack a punch in their compositions. Mandala-wise data collected on the term **Shata-krata** is given below [1].

**Shata-krata/शतक्रत: 1(13), 2(2), 3(7), 4(1), 5(3), 6(2), 7(1), 8(36), 10(4)**

From the above data it is evident that the Poets of **Mandala-8** have used the said term about **36 times** which is more than the total references found in other Mandalas. Also no Singer from **Mandala-9** (Soma Pavamana Mandala) has applied this term in any song. In the **Late Mandala hymn Rv-8.36; Shata-krato /शतक्रतो** word appears in **six verses**, and in the **Early Mandala hymn Rv-3.37**, it is seen in **four** different verses.

**Notes:**

1. Like the masculine word **Ananta**, in **Rigved** there is a feminine word/character, Goddess **Aditi /अदिति** (the mother of **Seven Adityas**) which stands for limitless or without boundary.
2. It would be interesting to know whether in the documents or inscriptions of other contemporary **Bronze Age Civilizations**, an idea very similar to Rigvedic concept of **Ananta** is ever existed.
3. **Shatam Hima** and **Shatam Sharada** phrases imply that an **ideal life-span** of man is **hundred years**.

**Summing up** the discussion on the **Use of Natural Numbers in Rigvedic Poems**, it can be said that the **Composers of Rigved** have demonstrated their **numerical ability** through their **word-power**. A long before the start of Rigvedic Compositions, the ancestor of the pre-Rigvedic Rishis would have independently developed **decimal numerical system** on the bank of river **Saraswati**. When the **pre-Rigvedic Rishis** shaped the first warrior god **Indra** to take on **Vritra**, and then devised **Yajna**, with the opening of a fresh channel of the **Praise-songs**, more and more Vedic People got involved in presenting their ideas in the form of Poems. This has resulted in the stiff competition among the Poets that enhanced the use of **cardinal** and the **ordinal** numbers in the Songs to show **one up-manship** in the field of composition.

## II. Fractional Numbers:

A fraction or a fractional number is generally defined as the term that represents a part of a whole or Natural number. The word fraction has its origin in the Latin word "**fractio**" which means 'a breaking down, a division'. Fraction also means a part of a whole lot of objects. A fraction can be a portion or section of any quantity out of a whole, where the whole can be any number, a specific value, or a thing.

In **Rigvedic text**, a very few Poets have expressed their thoughts in the form of words to describe a fraction as a part of the whole. This is because, in **Rigved**, the numbers are not symbolically represented, and only a handful of indirect references that could be termed as the fractional numbers expressed in words are found in the **few Mandalas** and the most commonly employed fractional representation happens to be the term **अर्ध/Ardha/half**.

### अर्ध/Ardha /Half

The standard definition of the term **half** is one of the **two equal parts of an object**. The definition can be extended to any quantity, a feature or a character whether living or non-living. In other words, when something is divided into two equal parts, then both sections become the two halves of the original body/part.

The word **Ardha** and its derivatives are seen in a few verses only and those verses are; Rv-1.92,1; Rv-1.124,5 ; Rv-1.164,12 ;Rv-4.42,8; Rv-4.42,9; Rv5.44,10; Rv-6.27,5; Rv-6.30,1; Rv-7.18,16; and Rv-10.27,18 [1].

Selected verses taken from different Mandalas that hint at the use of Vedic term **Ardha** in the context of **half** are discussed below.

### अर्धदेवम्/Ardha-Devam/Half God or Demi God

**Rv-4.42,8:** *asmākam atra pitaras ta āsan sapta ṛṣayo daurghahe badhyamāne |  
ta āyajanta trasadasyum asyā indraṃ na vṛtraturam **ardhadevam** //*

**Rv-4.42,9:** *purukutsānī hi vām adāśad dhavyebhir indrāvaruṇā namobhiḥ |  
athā rājānaṃ trasadasyum asyā vṛtrahaṇaṃ dadathur **ardhadevam** //*

**Comment:** Verses belonging to the hymn addressed to **Indra** and **Varuna** convey us that the Poet has called the **Puru king Trasadasyu**, the son of **Purukutsa** as the **Ardha-Devam/Half God or Demi God** when he was alive. Please note that the **Ribhus** (three brothers) are given the status of Gods for their invaluable contributions during the development phase of **Yajna** ritual, but after their death.



## अर्ध वीरस्य / Ardha Virasya/Half Hero

**RV-7.18,16:** *ardham vīrasya śṛtapāmanindram parā śardhantaṃ nunude abhi kṣām |*  
*indro manyuṃ manyumyo mimāya bheje patho vartanimpatyamānaḥ ||*

**Comment:** Poet of the war hymn tells us that without God Indra, either **Trutsu** or **Sudasa** (refer to earlier verse **Rv-7.18,15**) is a **Half-hero** only. Please bear in mind that **Vasistha**, the **Lead Composer of Mandala-7** has attributed the victory of **Sudasa** and **Trutsus** in the **War of Ten Kings** to **Indra**. From this angle, the Poet has probably termed **Sudasa** as a **Half-Hero**.

### Only half of the warriors take part in cooking ram

**Rv-10.27,18:** *vi krośanāso viṣvañca āyan pacāti nemo nahi pakṣadardhaḥ |*  
*ayaṃ me devaḥ savitā tadāha drvanna id vanavatsarpirannaḥ ||*

# Crying aloud they ran in all directions: **One half of them will cook, and not the other.**

To me hath **Savitar**, this God, declared it: He will perform, whose food is wood and butter.

**Comment:** The verse **Rv-10.27,18** needs to be studied along with the earlier verse **Rv-10.27,17** wherein the Poet has hinted at the cooking of a ram/**Mesha** by the **Vira**/Warriors/heroes. In the above verse, Poet says that only half of would participate in cooking and other half would not join them as they have gone in different directions. Poet further says that **Savitar** has told him that the god would do favour to only those whose **food is wood and butter**, probably means the **Yajna performers** or the **Priests**. It also means, **Yajna fire** was not used for cooking flesh.

From the combined study of the verses **Rv-10.27,17** and **18**; it can be inferred that Rigvedic **Vira** or the **warriors** were the regular flesh eaters. But that is not the case with the Rigvedic Priests as the Poet has indirectly stated that they are mostly engaged in **Yajna activity** and not involved in cooking a **ram/Mesha**. Therefore, God **Savitar** likes them.

### Probable origin of the Vedic word अर्ध/ Ardha/ Half

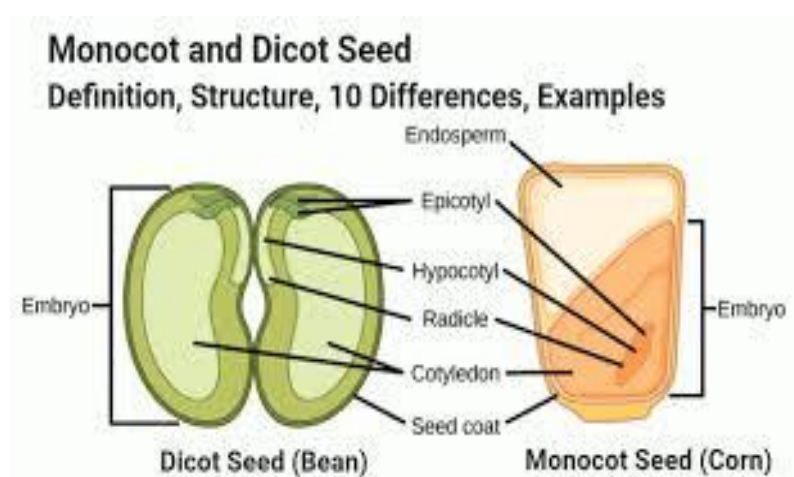
As discussed elsewhere, since pre-Rigvedic time, the Vedic People were knowing the decimal numerical system. However, the term **अर्ध/ Ardha/ Half** is different as it does not fall in the category of Natural number. Therefore, it is essential to understand, how the Priests learnt about the term **अर्ध / Ardha / Half**.

Since the concept of **zero** is absent in **Rigved**, hence it is assumed that the Priests would have got an idea of **अर्ध/ Ardha/ Half** after splitting a **single item into two equal halves**.

Literature available on **Harappan Civilization** informs us that the **Bronze Age People** who lived in the North-west corner of the Indian Sub-continent grew various crops like wheat, rice, lentils, barley, cotton and some varieties of millets. Among them, the pulses like peas, chickpeas, green gram, black gram etc. are considered for present discussion.

Here our main focus is on the **pulses** as most of them belong the class of the **dicotyledons**, also known as **dicots**. This is because, the seeds of most of the pulses when soaked in water, easily get divided into **two equal halves** and hence known as **dicotyledonous**. Whereas, seeds of wheat and rice cannot be easily divided into two halves, hence known as **monocots**. **Figure-1** shows the basic difference between the **Di** and **Mono** cotyledons.

**Figure-1: Schematic presentation of Dicot and Monocot.**



**Figure-2: Depiction of the Green Gram Grains. Conversion of a Single grain to two halves.**

**Green** colour-whole seeds. **Yellow** colour/skinned- after splitting seeds into two equal parts.



(Both images are sourced from Internet/Public domain)

From the above figures, it is crystal clear that pre-Rigvedic People would have derived the basic concept of fraction number अर्ध/ **Ardha/ Half** from the grains of pulses that can be readily separated into **two equal halves** (same thing holds true in case of **groundnut seeds**).

### **Presence of the terms; One-fourth and three-fourth Fractions in Purusha-Sukta Hymn**

**Purusha-Sukta** hymn belongs to the **Last Mandala of Rigved** and is one of the most discussed hymns of the ancient document. Following verses speak about the use of **fractional numbers** in them [1, 2].

**Rv-10.90,3:** *etāvānasya mahimāto jyāyāṁśca pūruṣaḥ /*

*pādo.asyaviśvā bhūtāni tripādasyāmṛtaṁ divi //*

# So mighty is his greatness; yea, greater than this is Purusa.

All creatures are **one-fourth of him, three-fourths eternal life in heaven.**

**Comment:** Poet in the above verse says that All beings found on Earth are created from the **one-fourth** part of mighty **Purusha**. The **three-fourth** of his body actually lies in Heaven.

**Rv-10.90,4:** *tripādūrdhva udait puruṣaḥ pādo.asyehābhavat punaḥ /*

*tato viṣvaṁ vyakrāmat sāsānāśane abhi //*

# With **three-fourths Purusa** went up: **one-fourth of him** again was here.

Thence he strode out to every side over what eats not and what eats.

**Comment:** Poet in the above verse claims that earlier **three-fourth of Purusha** went up (in Heaven) but **one-fourth of him** keeps coming on Earth again and again.

**Note:** In the above verses, **Sanskrit** term **tri-pada** is interpreted as **three-fourth**.

From the above explanation, it can be concluded that the **Purusha-Sukta** Poet had the proper understanding of fractions and hence cleverly employed the same in his composition.

(Even though **Griffith Translated Mandala-8** verse **Rv-8.47,17** does imply use of the fractional features like one-eighth (1/8) and one-sixteen (1/16) parts in it that are related to the recovery of the debt/**rina**, but due to lack of clarity on some original Sanskrit terms, the said verse has been excluded from the present discussion).

In addition to above, in the verse **Rv-1.164,45** of the famous ‘**Riddle hymn**’, the Poet has cryptically described the **division of Poetic Speech** or composed hymn or Song into **four parts**. He further states that the common men could know only **one-fourth part** or **fourth division** of the Speech and three (parts/divisions/sections) generally remain concealed from them. Only **Brahmana** or a knowledgeable person can understand/decipher the message hidden in the spoken words of the Poet. It practically means, the Priests were aware of, how to do the wordy presentation of Division or Partition of the **composed Padas** [1, 2].

**Rv-1.164,45: catvāri vāk parimitā padāni tāni vidurbrāhmaṇā ye manīṣiṇaḥ /  
ghuhā trīṇi nihitā neṅghayanti turīyaṃ vāco manuṣyā vadanti ||**

**चत्वारिवाक्परिमिता पदानितानि विदुर्ब्राह्मणा येमनीषिणः । गुहात्रीणिनिहितानेङ्गयन्ति तुरीयं वाचोमनुष्या वदन्ति ॥**

# Speech hath been **measured out in four divisions**, the **Brahmans** who have understanding know them.

**Three kept** in close concealment cause no motion; of speech, men speak only the **fourth division**.

#### **Summarization of the key points:**

- With the generous application of **cardinal** and **ordinal** numbers in the **Songs of Praise**, the **Rigvedic Poets** have surely added a new dimension to the ancient Poetry. This can be seen as the ‘**Value Addition**’ to the literature.
- As a matter of fact, since **pre-Rigvedic time**, Vedic People had thorough knowledge of both **Magnitude** and the **Order of Magnitude** of the **decimal numerical system**.
- Presentation of the bigger numbers through **Wordy Descriptions** but without directly mentioning any mathematical operation such as addition and/or multiplication is nothing but an **innovative mode of Poetic Thought**.
- Practically speaking, the applications of various forms of numbers in **Rigved** including the **Concept of Infinity** and **Fractional Numbers** take its Composers closer to what is currently known, as the **Progressive Thinkers**. And in the language of **Rigvedic Poets**, it can be described as *āryā jyotiragrāḥ* /आर्या ज्योतिरग्राः /the **Light Seeking Aryas**/ the **Knowledge Up-grading Aryas**.

#### **References:**

1. “**Rig Veda**” (Bilingual), Translated by Ralph T. H. Griffith (1896) in PDF
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